MONTANA HISTORIC PROPERTY RECORD
For the Montana National Register of Historic Places Program and State Antiquities Database

Montana State Historic Preservation Office
Montana Historical Society
PO Box 201202, 1410 8th Ave
Helena, MT 59620-1202

Property Address: **1500 University Drive** Historic Address (if applicable): **NA** City/Town: **Billings, MT**	Site Number: **24 YL 1861** (An historic district number may also apply.) County: **Yellowstone**
Historic Name: **Physical Education Building** Original Owner(s): **Montana State University - Billings** Current Ownership ☐ Private **X** Public Current Property Name: **Physical Education Building & Alterowitz Gym** Owner(s): **Montana State University - Billings** Owner Address: **1500 University Drive Billings, MT 59101** Phone: **800.565-6782**	Legal Location PM: **Montana** Township: **1N** Range: **26E** **NW** ¼ **NW** ¼ **NE** ¼ of Section: **32** Lot(s): **NA** Block(s): **NA** Addition: **Rimrock Rd MSU-B Campus** Year of Addition: **Unknown** USGS Quad Name: **Billings West** Year: **1957 updated 1975**
Historic Use: **Academic building** Current Use: **Academic building** Construction Date: **1961** ☐ Estimated **X** Actual **Additions 1969 & 1980; pedestrian underpass 1980** **X** Original Location ☐ Moved Date Moved:	UTM Reference www.nris.mt.gov/topofinder2 ☐ NAD 27 **X** NAD 83 (**preferred**) Zone: **12** Easting: 692926 Northing: 5074523
National Register of Historic Places NRHP Listing Date: Historic District: NRHP Eligible: X Yes ☐ No	Date of this document: **April 18, 2010** Form Prepared by: **Diana J. Painter, PhD** Address: **3518 N. C Street, Spokane, WA 99205** Daytime Phone: **(707) 364-0697**
MT SHPO USE ONLY Eligible for NRHP: X yes □ no Criteria: □ A □ B X C □ D Date: 11/17/2010 Evaluator: Kate Hampton	Comments:

ARCHITECTURAL DESCRIPTION **X** See Additional Information Page

Architectural Style: **Modern** If Other, specify: **Thin-shell concrete**
Property Type: **Academic building** Specific Property Type: **Gymnasium**

Architect: **Cushing & Terrell** Architectural Firm/City/State: **Cushing & Terrell, Billings, MT**
Builder/Contractor: **Lowe Construction Co.** Company/City/State: **Billings, MT**
Source of Information: **Newspaper**

Location and setting. The Physical Education Building at Montana State University at Billings is a two-story building (two floors and a basement) with an irregular footprint. The roof of the original building is made up of a series of barrel vaults of thin-shell concrete. The newer addition has a flat roof. Both Phase I and Phase II of the building were designed by Cushing and Terrell. The building is located east of the campus, on the east side of N. 27th Street, a major north-south arterial in Billings.

It is located at the base of the rim rock that forms this north edge of the city, and in fact extensive grading took place to site the building and associated playfield in this location. The building is oriented toward the west and the main campus. Just south of the building N. 27th Street begins to rise and curve toward the northwest. As a result of being sited at about the center of the rise, the building would have had a dramatic presence on this main road, augmented by the parallel line of the rimrock above the barrel vaults. However, the building is set back (east) of the street, the view from the south is obscured by mid-century strip development, and the view from the west is partially obscured by the addition to the building. The original building is highly visible from the corner of N. 27th Street and Mountain Blvd. however.

To the north of the building is Bjorgum Field, which is a playing field that has been cut into the hillside and looks out over the lower roofs of the building. To the east is university family housing. To the south are Mountain Blvd. and the irrigation canal. Adjacent to the canal on the south side is a commercial building, the former offices of Cushing and Terrell architects, who designed the Physical Education Building. Adjacent to the complex on the west side is N. 27th Street, the major arterial leading from Billings to the airport, and beyond this street is the main university campus.

Materials. The original building is reinforced concrete frame with concrete masonry unit infill, brick veneer, and a thin-shell concrete roof. The addition is also concrete with brick cladding. The foundations of both buildings are concrete. Additional materials include aluminum-frame windows, wood-frame windows, and flush metal doors.

Massing and design. The first phase of the building was constructed in 1960-61. It consists of the massive main gym building with its six parallel barrel vaults; a one-story pavilion on the west side that contains the main entry and wraps around to the north side; and the lower wing to the east, which displays the four barrel vaults over the original swimming pool.

A 1960 rendering of the building reveals that a one-story addition was always envisioned northwest of the original building, although it was to have a more open appearance it does today. The artist's rendering of the building also included an open pavilion in front of the building. This was not Included in original architectural drawings and was apparently never built.

ARCHITECTURAL DESCRIPTION

This area today is occupied by a plaza with three pyramidal skylights that light the underground pedestrian tunnel. The addition to the building, designed in 1979, was constructed to the northwest and connected to the main building at the lower level. While this building has a low profile, it occupies the foreground of the building as viewed from the major street and from the university to the west. It also has a higher roofline than apparently originally envisioned for the complex.

The original gym

West façade. The original gym has six barrel vaults that extend east-west, with a half vault that has the appearance of a shaped parapet on the north and south (side) facades. The main entry extends across west side of the building. This entrance, which is original to the building, is composed of four double doors with small lights and two panels of fixed lights with obscure and amber glass in an asymmetrical composition. Colors are blue, yellow, and amber. Above this one-story entry are the endwalls of the vaults, which are finished in brick and have no openings other that louvered grills in the middle of each bay and under the arches of the vaults. The building as a whole is clad in brick with regularly spaced concrete pilasters along the north and south facades. The roofs are smooth-finished concrete.

South façade. The south façade of the building is made up of a one-story portion toward the front (west) side, the two-story main building in the middle, and the shorter wing toward the back (east) side that is set back from the main face of the building. The entire south façade of the building is about one floor above Mountain View Blvd. and the small parking area that forms the south border of the site. The yard slopes from the base of the building toward the street except where stairs traverse the yard to access doorways along this facade.

Near the ground in this location is a continuous row of one-over-one-light windows with aluminum frames in bays two-through-five. The upper light is fixed and the lower is an operable, awning-style sash. These light the interior of the lower level. A second row of windows is located about mid-way up this façade. These are irregularly spaced, one-over-one-light windows, and are new additions to the façade. A third row of one-over-one-light windows occur at the top of the wall, under the vaults. This motif is continued on the rear wing of the building.

A small entry with a flush door covered with a flat canopy is located toward the front of this façade on the one-story portion that encloses the entry vestibule. To the rear of the main façade is a slight offset. Within this area are a concrete stair with a tubular metal rail that leads from the yard to a landing and two double entry doors with transoms, one on the south face and one on the east face. These are covered with a flat roof and enclosed on the south side with a solid wall.

East façade. The east, rear façade of the building faces onto a short street called Pryor Street that traverses the slope here and terminates in the parking area behind the building. Visible on the rear of the building are the barrel vaults of the main building, plus the four barrel vaults on the lower, rear wing

ARCHITECTURAL DESCRIPTION

There are louvered vents within the bays on this façade, as there are on the front façade. The rear entry in this location, which is located where the rear wing joins the main portion of the building, is described above. There are no other openings on this façade. The one story addition on the north side of the façade displays a louvered vent.

North façade. The rear wing on the north façade of the building has the same appearance as the south façade, with the exception of a small, one-story addition located here. This addition has a double, flush metal door with two transom windows above. It is accessed via a concrete ramp. The main portion of the building has two large, nearly square grills toward the rear on this façade. A large brick-clad stack is located where a concrete rib would be, toward the rear of the building. The one-story portion of the building that wraps around from the west side contains a large, overhead door toward the rear, a large window, a pedestrian door, and clerestories under the eaves. This one-story wing abuts a new one-story portion of the large Phase II addition.

Interiors. The main front doors open onto a large lobby area where tickets and concessions are sold. This area displays original terrazzo floors, small colored tiles, and two large murals by artist Ben Steele. Walls are concrete masonry units set within a reinforced concrete frame. The interior of the main gym is open to the ceiling, where the vaults, skylights and clerestory windows are clearly visible from the floor and seating areas around the perimeter.

The addition. Additions to the building were constructed in 1969 and 1980. The appearances of the additions today are described as follows. The addition to the gymnasium is two stories, consisting of the main ground level and lower level below grade. Roof heights vary on this addition, corresponding to different uses within the interior. The building has a flat roof and is clad in brick in a running bond pattern, with soldier courses for accents at openings. The *west* façade of the building has a double-metal door with a two-part window to the right with a slanted sill. The *south* façade has two, two-part windows with a horizontal orientation and slanted sills on the left side. Between this portion of the building and the southerly projection to its right are two double entry doors with transom windows. The *north* façade has two entries and three additional openings along its length. This façade is close to the retained platform that is Bjorgum Field today.

Site changes. In 1980 a pedestrian underpass that extends from the grounds of the Physical Education Building to the main campus west of N. 27th Street was added to the site. On the east side of the street this addition manifests in an entry to an underground walkway under the plaza fronting the main portion of the building. The entry to the tunnel consists of a double, flush metal door with narrow, full-height lights that displays sidelights to each side and a large, six-light transom above. This entry is located adjacent to the street, within a narrow enclosure clad with brick. Adjacent to the entrance on the north side is a concrete wall that retains the hillside above. Abutting the entrance on the south side is a concrete stair with 30 steps and a tubular metal rail that leads to the main plaza in front of the building. This below-grade entry plaza is also accessed via the concrete sidewalk that parallels N. 27th Street on this side of the street, three brick-clad pyramids, about 6′-0″ in height, is located within the plaza along the length of the underground walkway to the building from the entry described above.

ARCHITECTURAL DESCRIPTION

These pyramids are glazed at the top to provide natural daylight within the pedestrian tunnel.

Changes over time. The major change to the 1961 Physical Education Building is the 1969 and 1979 addition northwest of the main building. Early renderings for the building reveal that this addition was envisioned from the beginning as a second phase. It appears, however, that there are some differences between the original conception and what was eventually built. The 1960 rendering shows a one-story addition that appears to be lower and more transparent than what was eventually built. The rendering also shows an open pavilion fronting the building that ties the main building and the addition together visually (this apparently was never built). In the rendering the horizontal line established by the height of the entry bay on the main building is continued to the north, ensuring that the addition does not overpower the main building, which was clearly intended to be the centerpiece for the development.

Additional changes include a small mechanical room addition in the northeast corner of the building, and the addition of one-over-one-light windows in the center of the south facade. It also appears that two of the original six entry bays were removed when the northwest addition was constructed.

Architectural context

The Physical Education Building is a concrete structure with a thin-shell concrete roof. A thin-shell concrete structure is defined as "a reinforced-concrete structure whose geometry is optimized to develop membrane forces for the support of the structure against gravity" *(Boothby, 2005:3)*. Thin-shell concrete in curvilinear and folded plate forms was a technology that attracted a great deal of attention in the 1960s, as it appeared that it had potential to inexpensively and expressively span large spaces, while avoiding the weight of traditional masonry.

Architectural historian Theodore Prudon has called the modern use of thin shell concrete "one of the most remarkable developments in architectural and engineering design . . ." *(Prudon, 2002:92)*. The use of modern thin-shell concrete in the United States began in the 1930s, but gained popularity in the post-war era. Some of the most well-known examples from this era are the TWA Terminal at the John F. Kennedy Airport in New York (1961) and the Kresge Auditorium at MIT in Cambridge (1950-55), both by Eero Saarinen. Thin-shell concrete structures are considered endangered, as both their reuse and repair can be difficult and/or costly *(Prudon, 2002:95)*. The Physical Education Building was identified as the first thin-shell concrete building in Montana when it was built *(New Building, New Concept To Teach Youth Fitness, 1961)*.

HISTORY OF PROPERTY **X** See Additional Information Page

The first phase of the Physical Education Building was designed in 1960 and constructed in 1960-61. It featured a gymnasium in the main central portion and a swimming pool under a lower wing to the east (see sheet 9 of 15). A second gymnasium was added in 1969. The large addition to the northwest was designed in 1979 by Cushing & Terrell and constructed in 1980. The underground pedestrian walkway and exterior renovations were also completed in 1980 *(Physical Education Building architectural drawings)*. Renovations also occurred in 1998. Original facilities include a 4,000 seat basketball arena and the swimming pool. The major addition added a gym and exercise room, office, handball courts, and a lounge. Today the facility also includes an indoor track and weight room facilities.

In early planning the university made it clear that the facility was to be a "physical education" facility, and not a field house; that is, it was to be used by students as an athletic facility in addition its possible use as a venue for watching sports. One reason for this distinction is that student fees were the source of funding, so the administration emphasized that the facility was for the students rather than the community at large. Dr. H. L. Steele, president of the university in the late 1950s, stated that, "When finished it will be the most complete facility of its kind in the Pacific Northwest" *(Himsl, 1959:1)*.

When first built the building was described as follows: "The ground floor contains shower and dressing rooms and facilities for gymnastics, handball, wrestling and corrective instruction. The first Floor has offices, classrooms, public lobby, main gym and a swimming pool.

INFORMATION SOURCES/BIBLIOGRAPHY ☐ See Additional Information Page

"Ben Steele's Personal Chronicle from Bataan to Hiroshima," http://artmontana.com/article/steele/biograph.html, accessed April 18, 2010.

Boothby, Thomas E., et. al., Case Studies in the Diagnosis and Repair of Historic Think-Shell Concrete Structures," *APT Bulletin,* Vol. 36, No. 2/3 (2005), pp. 3-11.

"Campus Maps & Buildings," Montana State University Billings, http://www.msubillings.edu/campus/gym.htm, accessed April 18, 2010.

"CTA Architects Engineers," http://www.ctagroup.com/about-us/ accessed January 2010.

Dennis, Kevin, "A Management-Conscious Firm Grows from a Remote Montana Base," *AIA Journal,* August 1974, pp. 56-58.

Himsl, A. B., "Eastern Plans Construction of $1,400,000 Physical Education Plant," *The Billings Gazette,* May 3, 1959, p. 1.

"Murals Create Sense of Movement," *The Billings Gazette,* November 3, 1961.

"New Building, New Concept To Teach Youth Fitness," *The Billings Gazette,* November 3, 1961.

"New EMCE Building," *The Billings Gazette,* February 4, 1960, p. 17.

Norman, Michael and Ben Steele, "The Memorial of the Mind," *The New York Times,* May 25, 2009.

Physical Education Building architectural drawings. On file, Montana State University, Billings Faculty Services. Accessed March 2010.

Prudon, Theodore H. M., *Preservation of Modern Architecture*. New York: John Wiley & Sons, Inc., 2008.

Sanborn Fire Insurance maps, 1923, 1923 updated to 1949, 1923 republished in 1958.

HISTORY OF PROPERTY

The second floor provides additional seating with fold- up seating which permits game courts to be used most of the time" *("New Building, New Concept To Teach Youth Fitness," 1961).* According to an article published when the building was dedicated, the barrel vaulted, thin-shell concrete roof was chosen because it was an economical way to cover a large expanse. It was also chosen for aesthetic reasons. The building was called "beautiful" and "impressive," and the roof was thought to recall Roman architecture. The article also stated that this was the first thin-shell concrete structure in Montana.

The Architects

The architects for the Physical Education Building were Cushing &Terrell, now known as CTA, from Billings, Montana. Cushing & Terrell was founded in 1938, when partners Ralph Cushing and Everett Terrell joined forces. Ralph Henry Cushing was born in Dillon, Montana on January 16, 1903. He was educated at Montana State College, from which he received a BS in Architecture in 1927. He went on to earn a BS in Architectural Engineering from the University of Michigan in 1932. He worked for others, apprenticing in architecture and engineering, before establishing the firm of Cushing, Terrell and Associates in 1938. Cushing's partner Edwin O. Terrell was born in Billings, Montana on February 11, 1908. He was educated at the University of Washington, where he earned a bachelor's degree in architecture in 1931. His first listed architectural employment was with Cushing, Terrell & Associates.

Cushing, Terrell and Associates had an established reputation in Montana at mid-century, based on extensive work in the areas of education (schools and university buildings) and healthcare (hospitals and related structures). They also designed numerous government office buildings and other building types for state and local government. Additional building types undertaken by the firm were commercial structures and resort developments. When faced with a downturn in the education market in 1966, the firm re-organized and expanded *(Dennis, 1974:57).* CTA was founded as the partnership of an engineer and an architect; it maintains an interdisciplinary practice today. It has sixteen offices throughout Montana and six other western states, and handles a wide variety of projects *types and sizes ("CTA Architects Engineers," http://www.ctagroup.com/about-us/).*

Cushing, Terrell and Associates designed a number of the buildings on the Montana State University – Billings campus. Their office, constructed in 1958, was located across N. 27th Street from the campus, just south of the Physical Education Building. Other notable buildings designed by the firm include Reid Hall and Hannon Hall on the Montana State University – Bozeman campus; buildings for the Midland Empire Fairgrounds in Billings; Highland Elementary School and Shrine Auditorium in Billings; the hospital in Red Lodge; the Dude Rancher Lodge in Billings; the Veteran's Hospital in Miles City; Deaconess Hospital in Billings; and the Montana Crippled Children's Association Rehabilitation Center in Missoula; among many others.

HISTORY OF PROPERTY

The artist

The artist who painted the murals in the Physical Education Building is Ben Steele, a Montana artist is retired from his position as the head of the Art Department at Montana State University Billings, where he taught for 23 years. Steele, who was born in Roundup, Montana, is best known for his documentation of the Bataan Death March during World War II and his experiences as a prisoner of war in the Philippines. His work is featured in *Tears in the Darkness: The Story of the Bataan Death March and Its Aftermath* and *Ben Steele, Prisoner of War*, and many other books on the subject. Steele, who at 93 is still practicing his profession, enjoys a national reputation.

The murals, which are on flanking walls in the main foyer of the Physical Education Building, are 78 feet long and 7 ½ feet high. They depict men and women participating in unspecified sporting activities. An article published when the building was opened noted that, "Steele executed the murals to blend with the modern concept of the building itself. The figures, too, are modern and more suggestive than realistic" *("Murals Create Sense of Movement," 1961)*. The murals are intact, as are the interiors of the foyer, which form a fitting context for the murals.

The University

Montana State University – Billings is a relatively 'young' college. It was founded in 1927 as the Eastern Montana Normal School and offered a two-year educational program. It awarded its first four-year degrees in 1947, and its first masters degrees in 1954. Before it became part of the Montana State University System in 1994 it was known as Eastern Montana College. Today it has over 4,000 students and 160 degree programs. The first building on the campus was McMullen Hall, which was constructed in 1935. Early photographs of the campus show that McMullen Hall is the only building from this era that still exists.

In 1949 the campus was just north of the city limits of Billings. It consisted of the main building, called the Eastern Montana Normal School Education and Administration Units (McMullen Hall); an auditorium and gymnasium to the north; a small classroom building east of the auditorium; and the Science Building, southwest of the main building *(Sanborn Fire Insurance map, 1923 updated to 1949)*. The first post-war building was the 1951 Women's Residence Hall and the second was the 1955 Student Union Building.

The Sanborn Fire Insurance map dated 1958 shows that by that time several new buildings had been added to the campus. Additionally, the university's name had been changed to the "Eastern Montana College of Education." New buildings on the campus included the Primary Education Building, which was west of the Science Building; the Student Union Building, east of the gymnasium; the Girls Dormitory (today this building is attached to Cisel Hall); the Men's Dormitory (Asparuke Hall today); and the Art Annex, which was used for offices then, and the Poly Building, both located in the far southeast corner of the campus *(Sanborn Fire Insurance map, 1923 updated to 1958)*. By this time the campus was within the city limits.

Today a number of large buildings have been added to the campus and it extends east across N. 27th Street to encompass the Physical Education Building and Student Family Housing. The campus also includes new dormitories and halls, a new library, a liberal arts building, a new College of Education, a large parking structure, and McDonald Hall, the only building south of Poly Drive.

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

NATIONAL REGISTER OF HISTORIC PLACES

NRHP Listing Date:
NRHP Eligibility: **X** Yes ☐ No **X** Individually ☐ Contributing to Historic District ☐ Noncontributing to Historic District
NRHP Criteria: ☐ A ☐ B **X** C ☐ D
Area of Significance: **Architecture** Period of Significance: **1961-1969**

STATEMENT OF SIGNIFICANCE ☐ See Additional Information Page

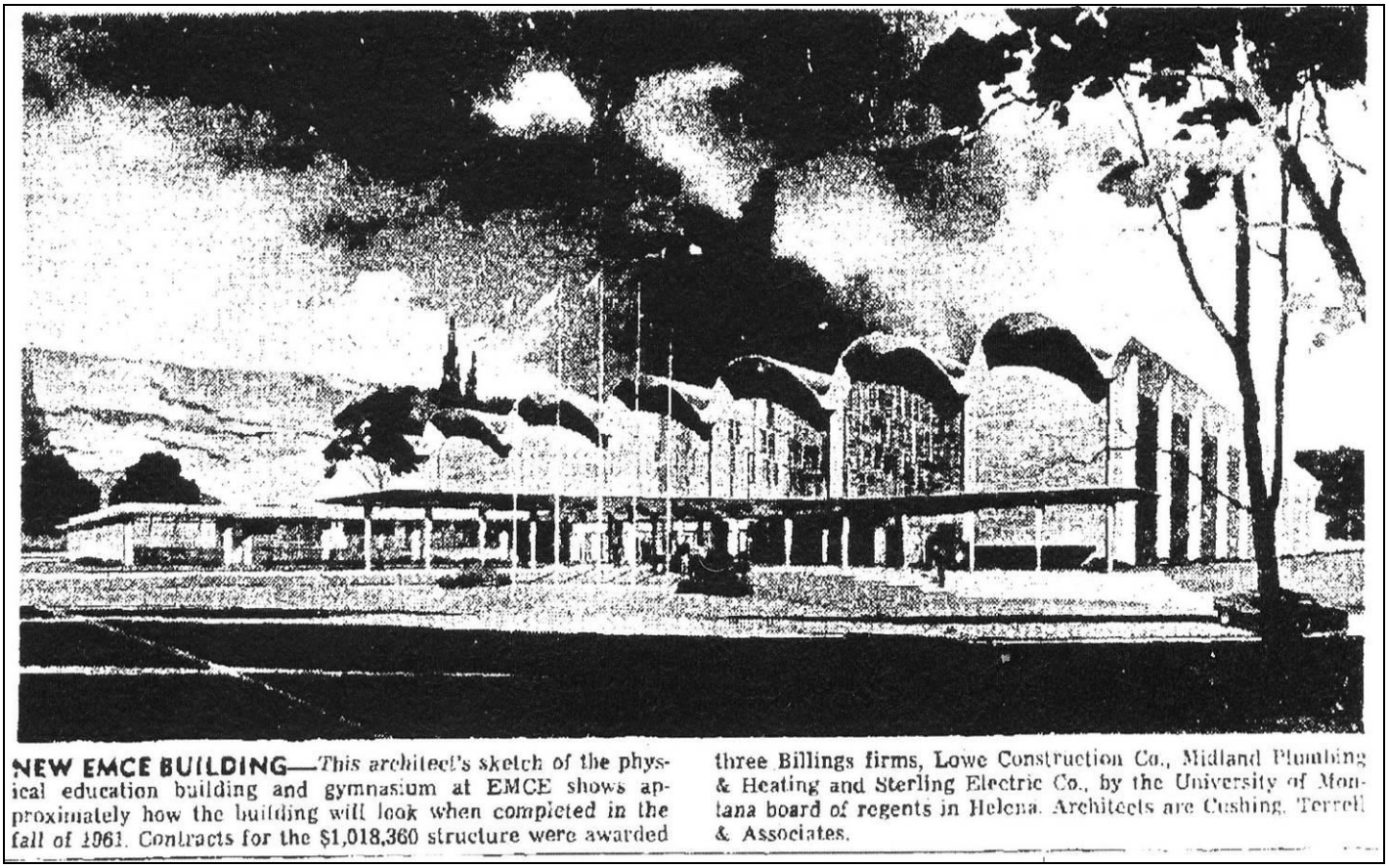
The Physical Education Building is significant with respect to National Register Criterion C for its architectural design and its association with a prominent Montana architectural firm. It is significant as (reputedly) Montana's first thin-shell concrete building, a technology that was first experimented in the United States in the 1930s, and that gained in popularity in the post-war era with such buildings as Eero Saarinen's 1961 TWA Terminal at John F. Kennedy Airport in New York. It is also significant for its association with the architectural firm of Cushing & Terrell (CTA today), which was founded in Billings in the 1930s and today has sixteen offices throughout the western United States. The firm was known for their progressive design work in the post-war era and for their work in educational and health care building types.

INTEGRITY ☐ See Additional Information Page

The Physical Education Building retains integrity of location, setting, materials, workmanship, and association. It does not retain integrity of design and feeling.

- Location - The building is located where it was historically
- Design – The design of the building has been altered with a new addition that is not compatible with the original design intent of the structure. It competes in scale with the original building and obscures portions of the original building's façade. Further, the addition of windows on the south façade undermines the original design expression of the plain, brick-clad bays of the building.
- Setting – The setting of the building reflects the setting at the time it was constructed.
- Materials – The materials of the building retain integrity. New materials are compatible with existing materials.
- Workmanship – Workmanship of the building is consistent over time. The original building displays an alternative building technology, but the craftsmanship of the subsequent additions is compatible with the earlier building.
- Feeling – The building, as a result of the subsequent additions, does not retain integrity of feeling.
- Association – The association of the building is sufficiently intact to retain integrity.

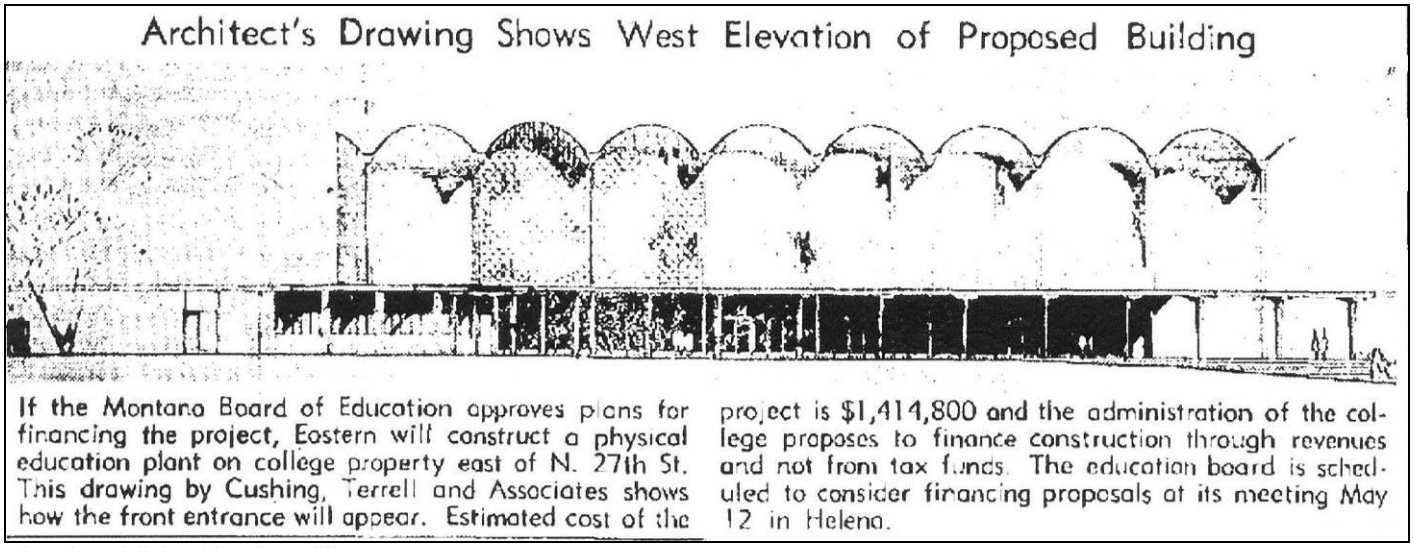
Although the building retains most of the aspects of integrity, the aspects of design and feeling are sufficiently important for this building to undermine its integrity.



NEW EMCE BUILDING—*This architect's sketch of the physical education building and gymnasium at EMCE shows approximately how the building will look when completed in the fall of 1961. Contracts for the $1,018,360 structure were awarded* three Billings firms, Lowe Construction Co., Midland Plumbing & Heating and Sterling Electric Co., by the University of Montana board of regents in Helena. Architects are Cushing, Terrell & Associates.

Rendering of Physical Education Building, 1960 *Source: The Billings Gazette*

Physical Education Building in 2010



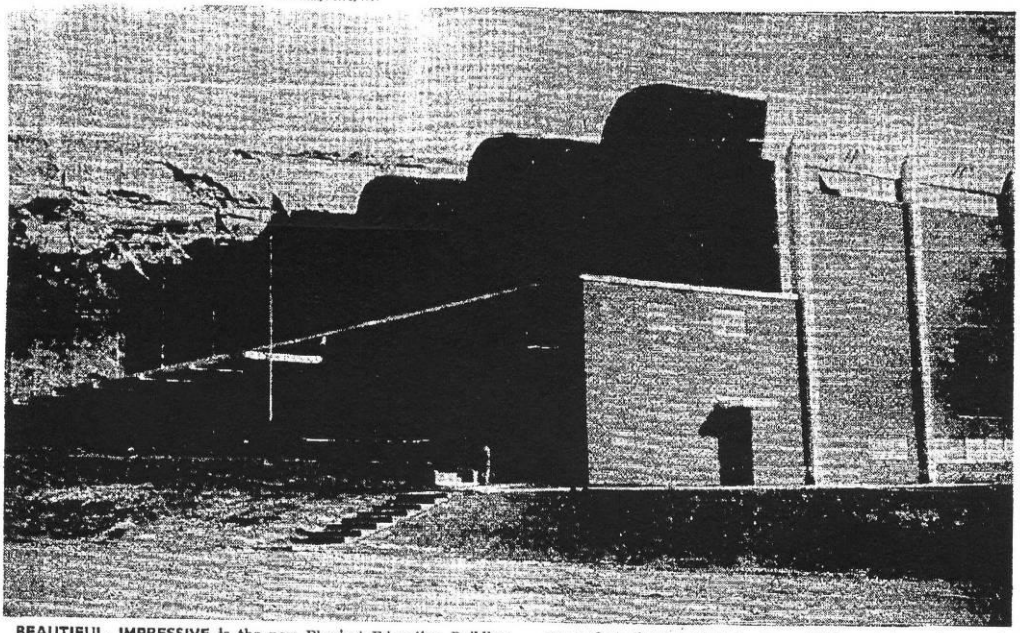
Architect's Drawing Shows West Elevation of Proposed Building

If the Montana Board of Education approves plans for financing the project, Eastern will construct a physical education plant on college property east of N. 27th St. This drawing by Cushing, Terrell and Associates shows how the front entrance will appear. Estimated cost of the project is $1,414,800 and the administration of the college proposes to finance construction through revenues and not from tax funds. The education board is scheduled to consider financing proposals at its meeting May 12 in Helena.

Sketch published in The Billings Gazette, May 3, 1959, p. 1

West façade of Physical Education Building in 2010

The Billings Gazette Fri. Morn., Nov. 3, 1961



BEAUTIFUL, IMPRESSIVE is the new Physical Education Building at Eastern Montana College with the landmark rimrocks in the background. The barrel roof which dates to the Romans covers 82,000 square feet of space which houses a 4,000 spectator seat gymnasium, a collegiate size swimming pool and the various rooms needed by the expanding Eastern Montana College physical education program.

NOT A FIELD HOUSE

New Building, New Concept To Teach Youth Fitness

Look for a hot argument if you call the new Physical Education Building at Eastern Montana College a field house. It isn't.

The new building to be formally dedicated Friday night was planned from its conception as a building in which to teach students physical fitness. It also will fill the need for intercollegiate basketball game crowds up to 4,000 and serve as a large assembly hall for graduations and other student activities.

Three Levels

Simple and rectangular in shape, the Physical Education Building has three levels. The ground floor contains shower and dressing rooms and facilities for gymnastics, handball, wrestling and corrective instruction.

The first floor has offices, classrooms, public lobby, main gym and a swimming pool. The second floor provides additional seating with fold-up seating which permits game courts to be used most of the time.

For Teaching

Requirements have been met in the 82,000 square feet of floor space for formal teaching classrooms and many teaching stations. Among subjects to be taught are basketball, volleyball, badminton, football, tumbling and trampolining, handball, wrestling, dancing, correctives, therapy and swimming.

Structural concepts were followed to meet with special requirements of physical education. Analysis indicated that a barrel roof of shell concrete would be most desirable from an economical viewpoint as well as esthetic. The barrel roof covers the main gym, a room 176 feet by 120 feet.

Barrel roof construction is not new. The Roman developed it, using stone, 2,000 years ago. This form has been used successfully in Europe, Central and South America for 40 years. However, this is the first of its type in Montana.

Concrete Frame

Brick-faced concrete frames the building. Interior partitions are of block. Ceramic tile was used to reduce maintenance costs in areas where needed.

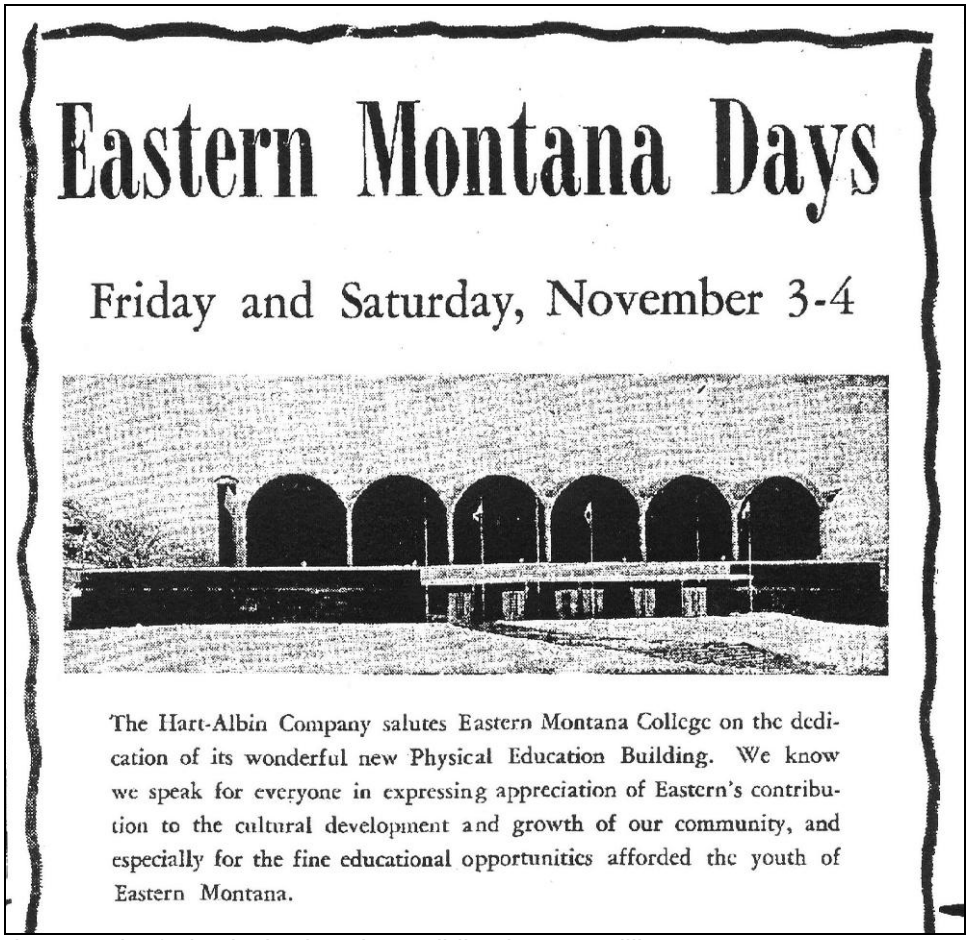
Terrazzo was used in the public lobby to withstand heavy traffic of regular school days or large crowds at basketball games. The gym floor is maple with remaining floor finishes of concrete or vinyl asbestos tile.

The vaulted gym ceiling was utilized to reflect indirect lighting that provides 75-foot candles of light on the playing floor.

Fresh Air Supply

Fresh air is supplied to the dressing rooms and activity rooms on the ground floor through a ventilating system that tempers, circulates and exhausts air, making this space under the gym floor usable, even though it has no direct connection to the exterior. This utilization of space has made it possible to combine so many activities into a small exterior shape.

STEADY THAR GAL says Frank Hailand, Eastern Montana College gymnastics instructor, as he helps a student learn a hand stand. Hailand is a former national AAU tumbling champ and runnerup for national trampoline honors.

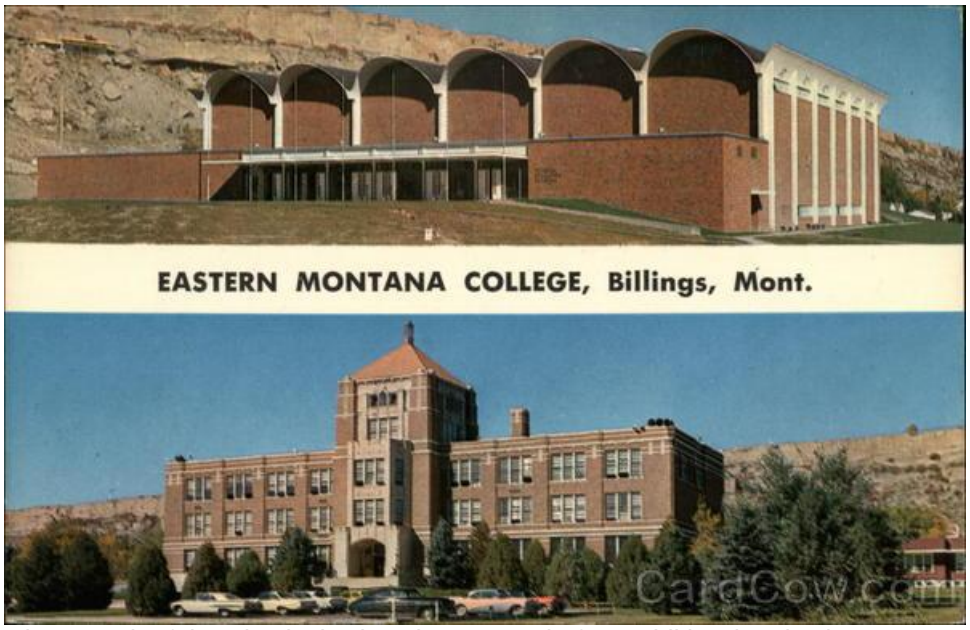


Eastern Montana Days

Friday and Saturday, November 3-4

The Hart-Albin Company salutes Eastern Montana College on the dedication of its wonderful new Physical Education Building. We know we speak for everyone in expressing appreciation of Eastern's contribution to the cultural development and growth of our community, and especially for the fine educational opportunities afforded the youth of Eastern Montana.

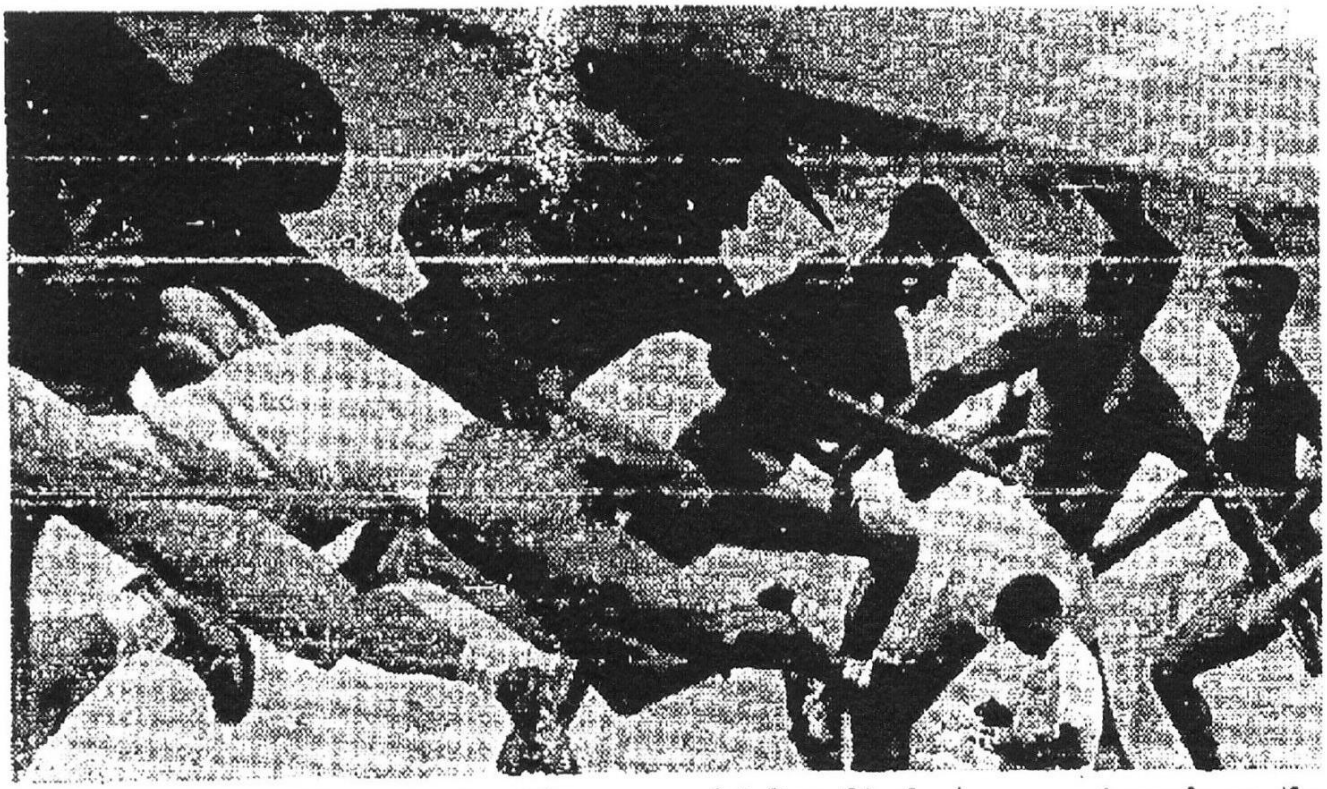
Photograph of Physical Education Building in 1961 Billings Gazette



Photograph of the Physical Education Center before addition (no date)

The Billings Gazette

..., Nov. 3, 1961



OUTDOOR SPORTS are depicted in one of the two murals which decorate the entrance at the Eastern Montana College Physical Education Building. Here artist Ben Steele is seen at work on the outdoor scene. The murals are 78 feet long and 7½ feet high.

Murals Create Sense of Movement

Even the murals create a sense of motion in the new Physical Education Building at Eastern Montana College. But the viewer can make up his mind as to what sport is involved.

The left panel depicts outdoor sports and the right, indoor activities, in the lobby of the new PE building.

Artist Ben Steele exaggerated the hair lines of the athletes to strengthen the movement of line and design.

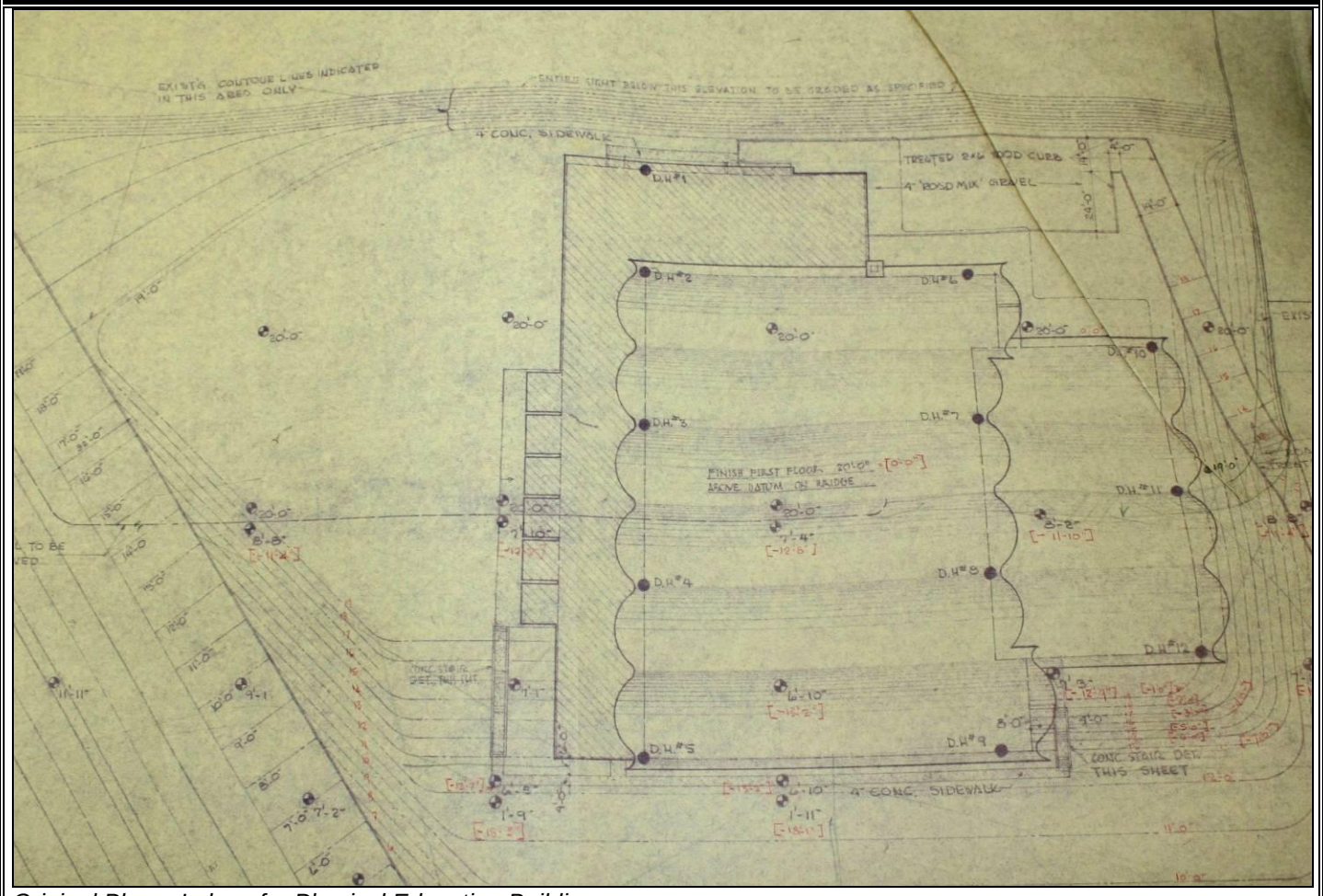
Steele executed the murals to blend with the modern concept of the building itself. The figures, too, are modern and more suggestive than realistic.

The artist painted the murals, some 28 feet high and 7½ feet long each, on a treated plaster wall. He used dry artists colors mixed with whole eggs, varnish, linseed oil and water.

Steele spent 750 hours of actual work on the murals in the step by step method invented by the ancient Egyptians. First came the scale designs, then treating of the wall followed by drawing the full size on paper. He then transferred the drawing to the treated wall and applied the paint.

Steele said the medium is considered excellent for murals because it has a mat finish and does not reflect light.

Article on mural painter, 1961 *Source: The Billings Gazette*



Original Phase I plans for Physical Education Building

MONTANA HISTORIC PROPERTY RECORD
PHOTOGRAPHS

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

Description: **South (side) façade**

Description: **South (side) façade, close-up of original building**

MONTANA HISTORIC PROPERTY RECORD
PHOTOGRAPHS

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

Description: **South (side) façade, close-up of new addition(s)**

Description: **East (rear) façade, viewed from southeast**

MONTANA HISTORIC PROPERTY RECORD
PHOTOGRAPHS

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

Description: **East (rear) façade of east wing, close-up**

Description: **Original portion of building, west and south facades with main entrance**

MONTANA HISTORIC PROPERTY RECORD
PHOTOGRAPHS

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

Description: **1979 addition and 1980 tunnel entrance and plaza skylights**

Description: **Main entrance, typical**

MONTANA HISTORIC PROPERTY RECORD
PHOTOGRAPHS

Property Name: **Physical Education Building** Site Number: **24 YL 1861**

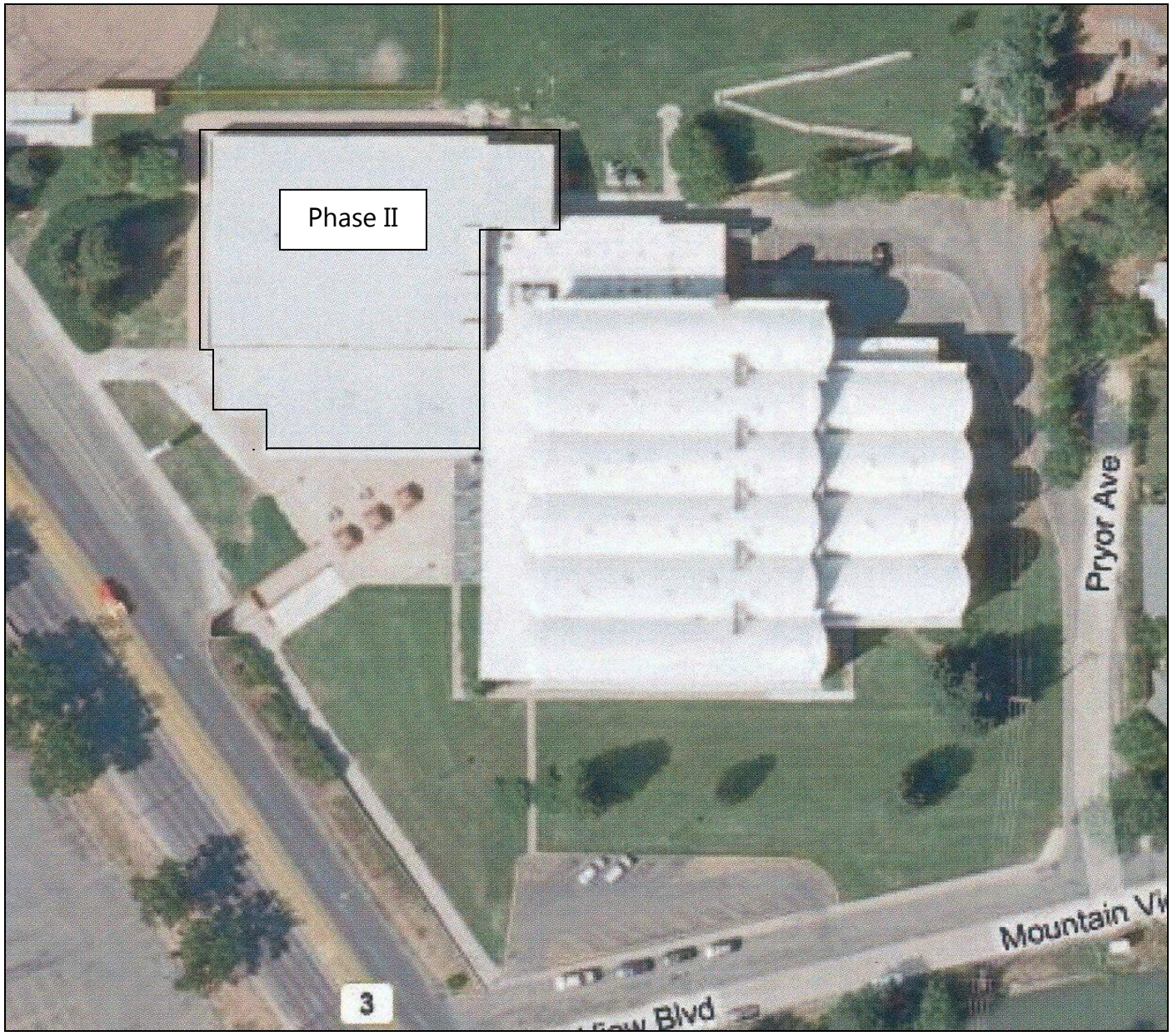
Description: **Interior view of vault, typical**

Description: **Interior mural, right side**

MONTANA HISTORIC PROPERTY RECORD

SITE MAP

Property Name: **Physical Education Building** Site Number: **24 YL 1861**



MSU Billings – Physical Education Building

MONTANA HISTORIC PROPERTY RECORD

TOPOGRAPHIC MAP

Property Name: **Physical Education Building** Site Number: **24 YL 1861**